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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,758	04/09/2004	David T. Marquardt	004.0050	1870
29906	7590	08/13/2007		
INGRASSIA FISHER & LORENZ, P.C.			EXAMINER	
7150 E. CAMELBACK, STE. 325			MORGAN, EILEEN P	
SCOTTSDALE, AZ 85251				
			ART UNIT	PAPER NUMBER
			3723	
			MAIL DATE	DELIVERY MODE
			08/13/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/821,758

Applicant(s)

MARQUARDT ET AL.

Examiner

Eileen P. Morgan

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 15-23 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,11-14 and 24 is/are rejected.
- 7) ☒ Claim(s) 8,10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3,4,5,11,13,24 rejected under 35 U.S.C. 102(b) as being anticipated by White-6,435,941.

White discloses a load cup mechanism comprising a pivot arm with a workpiece platform (706) with a peripheral load ring (outer periphery), a plurality of lift fingers (722) a plurality of guide fingers (724), and a support ring (702), wherein fluid is supplied through pins (408).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6,7,9,12,14 rejected under 35 U.S.C. 103(a) as being unpatentable over White, alone.

IN regard to claim 6, White does not disclose the support ring having spokes. However, the guide fingers (724) provide a spoke structure and therefore to have a spoke structure on the support ring would be an obvious design expedient in providing

additional central support. In regard to claim 9, White discloses an o-ring (721) disposed between the support ring and load ring but not a plurality of springs. However, the o-ring provides dampening and therefore, it would have been obvious of one of ordinary skill in the art at time invention was made to provide a plurality of dampening members, such as springs, since both perform equally well and are within the level of ordinary skill. In regard to claim 12, White uses the fluid flow through pins (408) to determine presence of wafer and not a gravity sensor. However, any known device, such as a gravity sensor or fluid flow, would have been obvious to one of ordinary skill in the art at time invention was made since they would perform equally well and the choice of either would be within the level of ordinary skill. In regard to claim 14, it would have been obvious to one of ordinary skill in the art at time invention was made provide the fingers with a pivot mechanism in order to properly position fingers while loading or unloading wafer.

Claims 2 rejected under 35 U.S.C. 103(a) as being unpatentable over White in view of Hempel et al.-6,227,950.

White does not disclose guide posts spaced about periphery. However, Hempel teaches a wafer conveyor with a loading mechanism comprising a holder (22) with a plurality of guide posts (86) to properly align and guide wafer. Therefore, it would have been obvious of one of ordinary skill in the art at time invention was made to provide White with a plurality of guide posts, as taught by Hempel, in order to properly align wafer in holder.

***Allowable Subject Matter***

Claims 8 and 10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eileen P. Morgan whose telephone number is 571.272.4488. The examiner can normally be reached on Monday-Thursday, 7am-3:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571.272.4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EM  
July 31, 2007

/Eileen P. Morgan/  
Primary Examiner, AU 3723